Statement of Rep. Anna G. Eshoo
Introduction of H.R. 5629, the *Pathway for Biosimilars Act*
U.S. House of Representatives
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Madam Speaker, the field of biotechnology is the future of medicine. Scientists and doctors are just beginning to scratch the surface of the potential to harness the extraordinary power of biology and the astounding natural processes which occur in the human body, in animals, and in other living organisms to advance breakthrough medical discoveries and treatments. While ordinary pharmaceuticals primarily treat the symptoms of a disease or illness, biotechnology products – "biologics" – can be manipulated to target the underlying mechanisms and pathways of a disease.

Through the study of biotechnology, we will develop effective treatments for cancer and AIDS, many of which are already saving lives. We will cure diabetes. We will prevent the onset of deadly and debilitating diseases such as Alzheimer's, heart disease, Parkinson's, multiple sclerosis and arthritis. We will save millions of lives and improve countless more.

The development of biologics is expensive and extremely risky. Bringing a biologic to market can require hundreds of millions of dollars in research and development costs and can take several years. For every successful biologic, there are another 10 or 20 that do not pan out, making the incentives for investment in this field extremely sensitive to any changes in the regulatory structure for biologics.

In the relatively young industry of biotechnology, many of the original patents on biologics are beginning to expire and it's appropriate for Congress to consider how "follow-on" biologics or "biosimilars" are considered and approved by the FDA, and the impact these products will have on patient health and safety, health care costs, and incentives for innovation.

As a primary matter, it's important to recognize that traditional "small-molecule" pharmaceuticals and biologics are fundamentally different in their development, their manufacture and their chemical makeup. A traditional small-molecule drug is manufactured through synthesis of chemical ingredients in an ordered process, and the resulting product can be easily identified through laboratory analysis. A biologic is a large, complex molecule, which is "grown" in living systems such as a microorganism, a plant or animal cell. The resulting protein is unique to the cell lines and specific process used to produce it, and even slight differences in the manufacturing of a biologic can alter its nature. As a result, biologics are difficult, sometimes impossible to characterize, and laboratory analysis of the finished product is insufficient to ensure its safety and efficacy.

The pharmaceutical drug production process is easily replicated and a "generic" drug product is virtually identical to the original innovative product, so generic drug manufacturers are permitted to reference the original testing data submitted by the innovator companies when the original drug is submitted to the FDA for approval. With

biologics, the manufacturing process is unique to each biologic and is not generally disclosed as part of the published patent. A biosimilar manufacturer would have to have intimate knowledge of these proprietary processes in order to "duplicate" the biologic product, and even then it is extremely difficult – no two living cell lines are identical, so no two biologics manufacturing processes have identical starting materials or proceed in the same way.

It's also important to note that because biologics are produced with cells from living organisms, many of them can cause an immune reaction which is normally benign and does not affect safety. However, some of these reactions can negate the effectiveness of the biologic or even cause side effects that are more dangerous. Most of these reactions can only be observed through clinical trials with real patients.

Any expedited regulatory pathway for biosimilars must account for all these factors and I'm proud to join with the Ranking Member of the Energy and Commerce Committee, Rep. Joe Barton, to introduce the *Pathway for Biologics Act*. Our bill builds on the significant progress the Senate, led by Senators Kennedy and Enzi, has already made, as well as the significant level of consensus we have heard on our Committee about this issue. The *Pathway for Biologics Act* will establish a new statutory pathway for biosimilars guided by three principles:

1. Legislation to facilitate the development of biosimilars should promote competition and lower prices, but patient safety, efficacy and sound science must be paramount.
2. We must preserve incentives for innovation and ensure that patients will continue to benefit from the ground-breaking treatments biotechnology alone can bring.
3. We must strive to protect the rights of all parties and resolve disputes over patents in a timely and efficient manner that does not delay market entry and provides certainty to all parties.

The regulatory pathway set forth in the *Pathway for Biologics Act* embodies each of these principles and sets forth a sensible, scientifically sound process for approval of biosimilars. The legislation allows for input from all interested parties and provides FDA appropriate flexibility to protect patient health by requesting analytical, animal and clinical studies to demonstrate the safety, purity and potency of a biosimilar. The FDA will be empowered to require the tests and data it deems necessary, but the results of clinical testing for immunogenicity will always be required as part of this data unless the FDA has published final guidance documents advising that such a determination is feasible in the current state of science absent clinical data and explaining the data that will be required to support such a determination. Since biologics are derived from human and animal products, immune reactions are a major concern for any new biologic product and are now impossible to detect without actual human testing.

Our legislation also addresses the important issue of interchangeability of biosimilars for the reference product. Some legislative proposals would allow the FDA to permit pharmacists and insurers to substitute a biosimilar for a physician's prescription for an

innovator biologic product even when they cannot be demonstrated to be identical in their composition or effectiveness. Interchangeability of generic pharmaceuticals for brand name drugs is entirely appropriate since traditional generic drugs are chemically identical to the reference product. However, if the state of science is such that a complex molecule cannot be fully characterized and a precursor biologic cannot be adequately compared to a proposed biosimilar, then the biosimilar should not be fully substitutable for the precursor product without a physician's direction. The *Pathway for Biologics Act* makes it clear that the FDA cannot make a determination that a biosimilar is interchangeable with a reference product until it has published final guidance documents advising that it is feasible in the current state of scientific knowledge to make such determinations with respect to the relevant product class and explaining the data that will be required to support such a determination. This requirement is consistent with the recommendations of the Secretary of Health and Human Services.

An essential element of any new regulatory scheme for the biotech industry is a careful balancing of incentives for innovation and opportunities for new entry by competitors. To preserve incentives for innovation, the *Pathway for Biologics Act* provides 12 years of data exclusivity for new biologic products, which ensures that biosimilar applications that rely on the safety and efficacy record of existing biologic products will not be permitted to enter the market for 12 years following the approval of the innovator product. The 12-year exclusivity period is meant to preserve existing protections biotech companies receive from patents. The Congressional Budget Office has found that the effective patent life for pharmaceuticals is about 11.5 years, so a data exclusivity period of 12 years is consistent with that finding. Data exclusivity is necessary to provide additional protections and incentives for biologics because biosimilars – unlike generic drugs – will not be chemically identical to the reference product and will be less likely to infringe the patents of the innovator.

The legislation also includes incentives for additional indications and pediatric testing. New indications are critical for biologics and are often more significant than the indications for which approval was granted. Incentives for continued testing on new indications must be included to promote access to new treatments and cures, and this bill provides an additional two years exclusivity for new indications. I also believe it's important to provide incentives similar to those given traditional pharmaceuticals under the *Best Pharmaceuticals for Children Act* to biologics, so the legislation provides an additional six months of data exclusivity for testing for use in pediatric groups.

In order to protect the rights of all parties and ensure that all patent disputes involving a biosimilar are resolved before the expiration of the data exclusivity period, the *Pathway for Biosimilars Act* establishes a simple, streamlined patent resolution process. This process would take place within a short window of time – roughly 6-8 months after the biosimilar application has been filed with the FDA. It will help ensure that litigation surrounding relevant patents will be resolved expeditiously and prior to the launch of the biosimilar product, providing certainty to the applicant, the reference product manufacturer, and the public at large. The legislation also preserves the ability of third-party patent holders such as universities and medical centers to defend their patents.

Once a biosimilar application is accepted by the FDA, the agency will publish a notice identifying the reference product and a designated agent for the biosimilar applicant. After an exchange of information to identify the relevant patents at issue, the applicant can decide to challenge any patent's validity or applicability. All information exchanged as part of this procedure must be maintained in strict confidence and used solely for the purpose of identifying patents relevant to the biosimilar product. The patent owner will then have two months to decide whether to enforce the patent. If the patent owner's case is successful in court, the final approval of the application will be deferred until the patent expires.

Madam Speaker, I believe the *Pathway for Biosimilars Act* sets forth a straightforward, scientifically based process for expedited approval of new biologics based on innovative products already on the market. This new biosimilars approval pathway will promote competition and lower prices, but also ensure that patients are given safe and effective treatments that have been subjected to thorough scrutiny and testing by the FDA. The *Pathway for Biosimilars Act* will also protect the rights of patent holders and preserve incentives for innovation in the biotechnology sector to develop the next generation of life-saving, life-changing therapies.

I strongly urge my colleagues to support the *Pathway for Biosimilars Act*.